

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please amend the originally submitted abstract as follows:

A power spectrum estimator ~~An equalizer~~ consistent with certain embodiments has a pulse extraction circuit that compares a digital input signal with a delayed version of the digital input signal to produce an output signal containing extracted pulses. An averaging circuit receives the output pulse and produces therefrom an averaged signal representing the averaged value of the output signal. A subtracter subtracts a reference signal from the averaged signal to produce a difference signal. An absolute value circuit converts the difference signal to an error signal by taking the absolute value of the difference signal. differential analog-tapped delay line made of a plurality of N series-connected analog delay cells. Each cell has a pair of differential inputs and a pair of differential outputs. The delay line receives an input signal to be equalized. The differential input pair of the nth cell is connected to the differential output pair of the (n-1)th cell such that current is mirrored from the output pair to the input pair to form N-1 differential taps. Each one of N-1 differential input multiplying digital to analog converters (MDAC) is connected at its differential input at each differential tap, with each MDAC multiplying an analog signal at its input by a digital weighting factor to produce an output at a differential output. A differential slicer receives a sum of the differential outputs from each of the MDACs and produces an equalized output. This abstract is not to be considered limiting, since other embodiments may deviate from the features described in this abstract.